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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,872	07/07/2003	Terry Dishongh	2207/807702	6979
23838	7590	07/27/2005		
			EXAMINER	
			HA, NGUYEN T	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/612,872	DISHONGH ET AL.	
	Examiner	Art Unit	
	Nguyen T Ha	2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12/13/2004.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,2,6,8,9,14,15 and 19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,2,6,8,9,14,15 and 19 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 12/13/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patent No. 6,775,122 has been reviewed and is accepted. The terminal disclaimer has been recorded.

However, examiner would like to make another rejection based on new prior art.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,2,6,8,9,14,15, and 19 rejected under 35 U.S.C. 102(b) as being anticipated by Nakagome (JP 09214092A).

Regarding claim 1, Nakagome discloses a circuit board comprising:

- first plane (top as shown in figure 12);
- a second plane (bottom as seen in figure 12);
- a via (26a) spanning said first and second plane; and
- an impedance component (28) placed in the via and coupled to the first plane and the second plane.

Regarding claim 2, note that the impedance component 28 disclosed by Nakagome is a resistor.

Regarding claim 6, note that the resistor 28 disclosed by Nakagome et al. comprises rolled carbon material having first (upper, see fig 12) end and second (lower, see fig 12) end, a first conductive cap 23 coupled to the first end, and a second conductive cap 24 coupled to the second end, wherein the first conductive cap 23 is coupled to the first (top) plane, and the second conductive cap 24 is coupled to the second (lower) plane.

Regarding claim 8, manufacture of the circuit board comprises adding impedance to a circuit board having a first plane, a second plane, and a via 26a spanning the first and second plane, the method comprising: forming an impedance component 28 having a first conductive cap 23 and a second conductive cap 24; placing the impedance component 28 in said via 26a; and coupling the first cap 23 to the first lane and the second cap 24 to the second plane.

Regarding claim 14, Nakagome discloses a circuit board comprising: a plurality of planes (top and bottom planes as shown in fig 12); a via 26a spanning at least two of the planes (top and bottom planes as shown in fig 12); and an impedance component 28 placed in the via 26a and coupled to at least two of said planes (the top and bottom planes as shown in fig 12).

Regarding claim 15, Nakagome discloses the impedance component (28) is a resistor

Regarding claim 19, note that the resistor 28 disclosed by Nakagome et al. comprises rolled carbon material having a first (upper, see fig 12) end and a second (lower, see fig 12) end; a first conductive cap 23 coupled to the first end, and a second

conductive cap 24 coupled to the second end; wherein the first conductive cap 23 is coupled to one plane (top) plane, and said second conductive cap 24 is coupled to a different plane of the circuit board.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-2, 6, 8-9, 14-15 and 19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 16, 17, 6, 18, 11, 19 and 20 of U.S. Patent No. 6,775,122. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the claimed limitations of the present application are recited in the claims of Patent No. 6,775,122 and therefore the claims 1, 16, 17, 6, 18, 11, 19 and 20 of Patent No. 6,775,112 anticipate the claims 1-2, 6, 8-9, 14-15 and 19 of the present patent application.

Conclusion

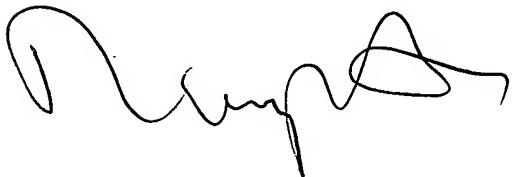
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T Ha whose telephone number is 571-272-

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1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nguyen T. Ha
June 13, 2005